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<input type="checkbox"/>	L8	5998204.pn.	2
<input type="checkbox"/>	L7	6197928	19
<input type="checkbox"/>	L6	L5 not l3	16
<input type="checkbox"/>	L5	fluorescen\$ with (fusion or hybrid) with (Ca2+ or calcium)	18
<input type="checkbox"/>	L3	pericam	7

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Search Results - Record(s) 1 through 10 of 16 returned.

1. Document ID: US 20040126850 A1

L6: Entry 1 of 16

File: PGPB

Jul 1, 2004

PGPUB-DOCUMENT-NUMBER: 20040126850

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040126850 A1

TITLE: Directed evolution of protein in Mammalian cells

PUBLICATION-DATE: July 1, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Peelle, Beau	Somerville	MA	US	

US-CL-CURRENT: [435/69.1](#); [435/320.1](#), [435/325](#), [530/350](#), [536/23.5](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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2. Document ID: US 20030077730 A1

L6: Entry 2 of 16

File: PGPB

Apr 24, 2003

PGPUB-DOCUMENT-NUMBER: 20030077730

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030077730 A1

TITLE: Directed evolution of protein in mammalian cells

PUBLICATION-DATE: April 24, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Peelle, Beau	Somerville	MA	US	

US-CL-CURRENT: [435/69.1](#); [435/320.1](#), [435/325](#), [435/6](#), [530/350](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 20030049695 A1

L6: Entry 3 of 16

File: PGPB

Mar 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030049695

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030049695 A1

TITLE: PDZ domain interactions and lipid rafts

PUBLICATION-DATE: March 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lu, Peter S.	Mountain View	CA	US	
Diaz-Sarmiento, Chamorro Somoza	Palo Alto	CA	US	
Seed, Brian	Boston	MA	US	
Xavier, Ramnik	Boston	MA	US	
Irving, Bryan Allen	San Francisco	CA	US	

US-CL-CURRENT: 435/7.21

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 4. Document ID: US 20030026831 A1

L6: Entry 4 of 16

File: PGPB

Feb 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030026831

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030026831 A1

TITLE: Anionic liposomes for delivery of bioactive agents

PUBLICATION-DATE: February 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lakkaraju, Aparna	Minneapolis	MN	US	
Dubinsky, Janet M.	St. Paul	MN	US	
Low, Walter	Shorewood	MN	US	
Rahman, Yueh-Erh	LaJolla	CA	US	

US-CL-CURRENT: 424/450

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 5. Document ID: US 20030003511 A1

L6: Entry 5 of 16

File: PGPB

Jan 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030003511
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030003511 A1

TITLE: Closure of bacterial ghost

PUBLICATION-DATE: January 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lubitz, Werner	Vienna		AT	
Paukner, Susanne	Krems		AT	

US-CL-CURRENT: 435/7.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 6. Document ID: US 20020147309 A1

L6: Entry 6 of 16

File: PGPB

Oct 10, 2002

PGPUB-DOCUMENT-NUMBER: 20020147309
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020147309 A1

TITLE: Human N-type calcium channel isoform and uses thereof

PUBLICATION-DATE: October 10, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lipscombe, Diane	Barrington	RI	US	
Schorge, Stephanie	Charvil		GB	

US-CL-CURRENT: 530/350; 424/146.1, 530/388.26, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 7. Document ID: US 20010046664 A1

L6: Entry 7 of 16

File: PGPB

Nov 29, 2001

PGPUB-DOCUMENT-NUMBER: 20010046664
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20010046664 A1

TITLE: Screening assays using intramitochondrial calcium

PUBLICATION-DATE: November 29, 2001

h e b b g e e e f e e e e f b e

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Murphy, Anne N.	Encinitas	CA	US	
Stout, Amy K.	Atlanta	GA	US	

US-CL-CURRENT: 435/4; 435/6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMNC	Draw De
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☐ 8. Document ID: US 6723537 B2

L6: Entry 8 of 16

File: USPT

Apr 20, 2004

US-PAT-NO: 6723537

DOCUMENT-IDENTIFIER: US 6723537 B2

TITLE: Directed evolution of protein in mammalian cells

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMNC	Draw De
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☐ 9. Document ID: US 6649564 B1

L6: Entry 9 of 16

File: USPT

Nov 18, 2003

US-PAT-NO: 6649564

DOCUMENT-IDENTIFIER: US 6649564 B1

TITLE: Information recording sheet and method of manufacturing information recording sheet

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMNC	Draw De
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☐ 10. Document ID: US 6353091 B1

L6: Entry 10 of 16

File: USPT

Mar 5, 2002

US-PAT-NO: 6353091

DOCUMENT-IDENTIFIER: US 6353091 B1

TITLE: Human N-type calcium channel isoform

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMNC	Draw De
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Terms	Documents
L5 not L3	16

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Search Results - Record(s) 11 through 16 of 16 returned.

☐ 11. Document ID: US 6316409 B1

L6: Entry 11 of 16

File: USPT

Nov 13, 2001

US-PAT-NO: 6316409

DOCUMENT-IDENTIFIER: US 6316409 B1

TITLE: Modified ligands of calcium-dependent binding proteins

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw. De
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☐ 12. Document ID: US 5315091 A

L6: Entry 12 of 16

File: USPT

May 24, 1994

US-PAT-NO: 5315091

DOCUMENT-IDENTIFIER: US 5315091 A

**** See image for Certificate of Correction ****

TITLE: Resistively heated sample preparation apparatus

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw. De
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	----------

☐ 13. Document ID: EP 1238982 A1

L6: Entry 13 of 16

File: EPAB

Sep 11, 2002

PUB-NO: EP001238982A1

DOCUMENT-IDENTIFIER: EP 1238982 A1

TITLE: A Fluorescent Protein

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw. De
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	----------

☐ 14. Document ID: CN 1468312 A, WO 200192300 A2, AU 200170583 A, EP 1292613 A2, US 20030066095 A1, US 20030175807 A1

L6: Entry 14 of 16

File: DWPI

Jan 14, 2004

DERWENT-ACC-NO: 2002-139605

DERWENT-WEEK: 200423

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TITLE: New fusion protein comprising a modified bioluminescent system with a fluorescent molecule covalently linked with a photoprotein, useful for monitoring calcium fluxes or for detecting electrical activity in a group of neural cells

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWMC	Draw. De
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☐ 15. Document ID: WO 9003576 A, JP 2907473 B2, AU 8943068 A, EP 436598 A, JP 04500907 W, AU 634980 B, EP 436598 B1, DE 68925973 E, CA 1339557 C

L6: Entry 15 of 16

File: DWPI

Apr 5, 1990

DERWENT-ACC-NO: 1990-132355

DERWENT-WEEK: 199930

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TITLE: Selection of hybrid cells - by fluorescence activated cell sorting of cell populations labelled with different fluorescent dyes

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWMC	Draw. De
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☐ 16. Document ID: US 2210780 A

L6: Entry 16 of 16

File: USOC

Aug 6, 1940

US-PAT-NO: 2210780

DOCUMENT-IDENTIFIER: US 2210780 A

TITLE: Electric discharge tube

DATE-ISSUED: August 6, 1940

INVENTOR-NAME: MARCEL SERVIGNE

US-CL-CURRENT: 313/486; 252/301.4R, 252/301.5, 313/577

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWMC	Draw. De
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Terms	Documents
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Search Results - Record(s) 1 through 7 of 7 returned.

☐ 1. Document ID: US 20040023203 A1

L1: Entry 1 of 7

File: PGPB

Feb 5, 2004

PGPUB-DOCUMENT-NUMBER: 20040023203

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040023203 A1

TITLE: Heterologous stimulus-gated ion channels and methods of using same

PUBLICATION-DATE: February 5, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Miesenbock, Gero	New York	NY	US	
Zemelman, Bosis	New York	NY	US	

US-CL-CURRENT: 435/4; 435/320.1, 435/325, 435/456, 530/350, 558/273, 558/275

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 2. Document ID: US 20030161039 A1

L1: Entry 2 of 7

File: PGPB

Aug 28, 2003

PGPUB-DOCUMENT-NUMBER: 20030161039

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030161039 A1

TITLE: Illumination system for microscopy and observation or measuring method using the same

PUBLICATION-DATE: August 28, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Fukano, Takashi	Wako-shi	NY	JP	
Miyawaki, Atsushi	Wako-shi		JP	
Shimizu, Keiji	Tokyo		JP	
Kawano, Yoshihiro	Hicksville		US	

US-CL-CURRENT: 359/388; 359/368, 359/385

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 3. Document ID: US 20030017538 A1

L1: Entry 3 of 7

File: PGPB

Jan 23, 2003

PGPUB-DOCUMENT-NUMBER: 20030017538

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030017538 A1

TITLE: Fluorescent protein

PUBLICATION-DATE: January 23, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Miyawaki, Atsushi	Wako-shi		JP	
Nagai, Takeharu	Tokyo		JP	

US-CL-CURRENT: 435/69.1; 435/320.1, 435/325, 435/7.21, 530/350, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 4. Document ID: US 20030004306 A1

L1: Entry 4 of 7

File: PGPB

Jan 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030004306

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030004306 A1

TITLE: Fluorescent protein

PUBLICATION-DATE: January 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Miyawaki, Atsushi	Wako-shi		JP	
Nagai, Takeharu	Tokyo		JP	

US-CL-CURRENT: 530/300

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 5. Document ID: US 6686763 B1

L1: Entry 5 of 7

File: USPT

Feb 3, 2004

US-PAT-NO: 6686763

DOCUMENT-IDENTIFIER: US 6686763 B1

TITLE: Near-zero propagation-delay active-terminator using transmission gate

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw De
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☐ 6. Document ID: US 6686763 B1

L1: Entry 6 of 7

File: DWPI

Feb 3, 2004

DERWENT-ACC-NO: 2004-189714

DERWENT-WEEK: 200418

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TITLE: Non-zero propagation delay active terminating buffer for transmission line, uses gate signal from control logic to connect or disconnect load to transmission line

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw De
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☐ 7. Document ID: US 20030004306 A1, EP 1238982 A1, JP 2002253261 A

L1: Entry 7 of 7

File: DWPI

Jan 2, 2003

DERWENT-ACC-NO: 2002-724916

DERWENT-WEEK: 200305

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TITLE: New fluorescent protein, useful as indicator for quantifying calcium ion concentration, comprises a fusion of a fluorescent protein, a calcium binding protein and a linker

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Draw De
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NEWS 4 May 12 Polymer links for the POLYLINK command completed in REGISTRY
NEWS 5 May 27 New UPM (Update Code Maximum) field for more efficient patent
SDIs in CAPlus
NEWS 6 May 27 CAPlus super roles and document types searchable in REGISTRY
NEWS 7 Jun 22 STN Patent Forums to be held July 19-22, 2004
NEWS 8 Jun 28 Additional enzyme-catalyzed reactions added to CASREACT
NEWS 9 Jun 28 ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG,
and WATER from CSA now available on STN(R)
NEWS 10 Jul 12 BEILSTEIN enhanced with new display and select options,
resulting in a closer connection to BABS

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AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
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L1 96 PERICAM

=> s pericam and fluorescen?
L2 76 PERICAM AND FLUORESCEN?

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3 25 DUP REM L2 (51 DUPLICATES REMOVED)

=> d 1-10

L3 ANSWER 1 OF 25 MEDLINE on STN
AN 2004247337 MEDLINE
DN PubMed ID: 15024001
TI Ca(2+) homeostasis during mitochondrial fragmentation and perinuclear
clustering induced by hFis1.
AU Frieden Maud; James Dominic; Castelbou Cyril; Danckaert Anne; Martinou
Jean-Claude; Demaurex Nicolas
CS Department of Physiology, University of Geneva Medical Center, Geneva 4,
Switzerland.
SO Journal of biological chemistry, (2004 May 21) 279 (21) 22704-14.
Journal code: 2985121R. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200406
ED Entered STN: 20040518
Last Updated on STN: 20040701
Entered Medline: 20040630

L3 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:504709 HCAPLUS
TI Functional ****fluorescent*** Ca2+ indicator proteins in transgenic
mice under TET control
AU Hasan, Mazahir T.; Friedrich, Rainer W.; Euler, Thomas; Larkum, Matthew
E.; Duebel, Ens; Waters, Jack; Bujard, Hermann; Griesbeck, Oliver; Tsien,
Roger Y.; Nagai, Takeharu; Miyawaki, Atsushi; Denk, Winfried
CS Max Planck Institute for Medical Research, Heidelberg, Germany
SO PLoS Biology (2004), 2(6), 763-775
CODEN: PBLIBG; ISSN: 1545-7885
URL: http://www.plosbiology.org/archive/1545-7885/2/6/pdf/10.1371_1545-7885_2_6_complete.pdf
PB Public Library of Science
DT Journal; (online computer file)
LA English
RE.CNT 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 25 MEDLINE on STN
AN 2004306399 IN-PROCESS
DN PubMed ID: 15208716
TI Functional ****Fluorescent*** Ca(2+) Indicator Proteins in Transgenic
Mice under TET Control.
AU Hasan Mazahir T; Friedrich Rainer W; Euler Thomas; Larkum Matthew E; Giese
G G UNter; Both Matthias; Duebel Jens; Waters Jack; Bujard Hermann;
Griesbeck Oliver; Tsien Roger Y; Nagai Takeharu; Miyawaki Atsushi; Denk

winfried
 CS Max Planck Institute for Medical Research, Heidelberg, Germany..
 mhasan@mpimf-heidelberg.mpg.de
 SO PLoS biology, (2004 Jun) 2 (6) E163.
 Journal code: 101183755. ISSN: 1544-9173.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
 ED Entered STN: 20040624
 Last Updated on STN: 20040624

L3 ANSWER 4 OF 25 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 DUPLICATE 1
 AN 2004-03782 BIOTECHDS
 TI Activating eukaryotic target cells involves sensitizing target cells by
 expressing heterologous stimulus-gated ion channel in target cells and
 applying stimulus to sensitized target cells to trigger ion channel;
 activating eukaryotic target cell production by vector-mediated
 heterologous stimulus-gated ion channel TRPV1, TRPM8 and P2X2 gene
 transfer and expression, transgenic mouse and knock-in animal for
 neuronal or neuroendocrine pathway mapping, diagnosis and gene therapy
 AU MIESENBOCK G A; ZEMELMAN B V
 PA SLOAN KETTERING INST CANCER RES
 PI WO 2003102156 11 Dec 2003
 AI WO 2003-US17448 2 Jun 2003
 PRAI US 2003-441452 21 Jan 2003; US 2002-384670 31 May 2002
 DT Patent
 LA English
 OS WPI: 2004-043101 [04]

L3 ANSWER 5 OF 25 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
 AN 2003:979033 SCISEARCH
 GA The Genuine Article (R) Number: 738UR
 TI Sustained Ca²⁺ transfer across mitochondria is essential for mitochondrial
 Ca²⁺ buffering, store-operated Ca²⁺ entry, and Ca²⁺ store refilling
 AU Malli R; Frieden M; Osibow K; Zoratti C; Mayer M; Demaurex N; Graier W F
 (Reprint)
 CS Graz Univ, Dept Med Biochem & Med Mol Biol, Harrachgasse 21-3, A-8010
 Graz, Austria (Reprint); Graz Univ, Dept Med Biochem & Med Mol Biol,
 A-8010 Graz, Austria; Univ Geneva, Dept Physiol, CH-1211 Geneva 4,
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 CYA Austria; Switzerland
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (7 NOV 2003) Vol. 278, No. 45, pp.
 44769-44779.
 Publisher: AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC, 9650 ROCKVILLE
 PIKE, BETHESDA, MD 20814-3996 USA.
 ISSN: 0021-9258.
 DT Article; Journal
 LA English
 REC Reference Count: 47
 ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L3 ANSWER 6 OF 25 MEDLINE on STN DUPLICATE 2
 AN 2003454259 MEDLINE
 DN PubMed ID: 12874292
 TI Stable interactions between mitochondria and endoplasmic reticulum allow
 rapid accumulation of calcium in a subpopulation of mitochondria.
 AU Filippin Luisa; Magalhaes Paulo J; Di Benedetto Giulietta; Colella
 Matilde; Pozzan Tullio
 CS Department of Biomedical Sciences and CNR Institute of Neuroscience,
 University of Padua, Viale G. Colombo 3, 35121 Padua, Italy..
 luisa.filippin@unipd.it
 SO Journal of biological chemistry, (2003 Oct 3) 278 (40) 39224-34.
 Journal code: 2985121R. ISSN: 0021-9258.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200311
 ED Entered STN: 20030930
 Last Updated on STN: 20031107
 Entered Medline: 20031106

L3 ANSWER 7 OF 25 MEDLINE on STN DUPLICATE 3
 AN 2003440273 MEDLINE

DN PubMed ID: 12960050
TI Intracellular transport of calcium from plasma membrane to mitochondria in
adrenal H295R cells: implication for steroidogenesis.
AU Lalevee Nathalie; Resin Veronique; Arnaudeau Serge; Demaurex Nicolas;
Rossier Michel F
CS Division of Endocrinology and Diabetology, Department of Internal
Medicine, University Hospital, CH-1211 Geneva 14, Switzerland.
SO Endocrinology, (2003 Oct) 144 (10) 4575-85.
Journal code: 0375040. ISSN: 0013-7227.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 200310
ED Entered STN: 20030923
Last Updated on STN: 20031030
Entered Medline: 20031029

L3 ANSWER 8 OF 25 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
AN 2004:11620 SCISEARCH
GA The Genuine Article (R) Number: 755PZ
TI Anandamide initiates Ca2+ signaling via CB2 receptor linked to
phospholipase C in calf pulmonary endothelial cells
AU Zoratti C; Kipmen-Korgun D; Osibow K; Malli R; Graier W F (Reprint)
CS Graz Univ, Dept Med Biochem & Med Mol Biol, Harrachgasse 21-III, A-8010
Graz, Austria (Reprint); Graz Univ, Dept Med Biochem & Med Mol Biol,
A-8010 Graz, Austria
CYA Austria
SO BRITISH JOURNAL OF PHARMACOLOGY, (DEC 2003) Vol. 140, No. 8, pp.
1351-1362.
Publisher: NATURE PUBLISHING GROUP, MACMILLAN BUILDING, 4 CRINAN ST,
LONDON N1 9XW, ENGLAND.
ISSN: 0007-1188.
DT Article; Journal
LA English
REC Reference Count: 56
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L3 ANSWER 9 OF 25 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN DUPLICATE 4
AN 2003078812 EMBASE
TI Development of genetically encoded ***fluorescent*** indicators for
calcium.
AU Miyawaki A.; Mizuno H.; Nagai T.; Sawano A.
CS A. Miyawaki, Laboratory for Cell Function, Adv. Technology Development
Group, Inst. of Physical/Chemical Research, Wako City, Saitama 351-0198,
Japan
SO Methods in Enzymology, (2003) 360/- (202-225).
Refs: 23
ISSN: 0076-6879 CODEN: MENZAU
CY United States
DT Journal; Article
FS 029 Clinical Biochemistry
LA English

L3 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:475640 HCAPLUS
DN 140:107562
TI Novel fluorogenic indicator protein For analyzing dynamics of motor organ
by imaging
AU Nagai, Takeharu; Miyawaki, Atsushi
CS Laboratory for Cell Function Dynamics, RIKEN Brain Science Institute,
Wako, Saitama, 351-0198, Japan
SO Igaku no Ayumi (2003), 205(3), 193-196
CODEN: IGAYAY; ISSN: 0039-2359
PB Ishiyaku Shuppan
DT Journal; General Review
LA Japanese

=> d 11-25

L3 ANSWER 11 OF 25 MEDLINE on STN DUPLICATE 5
AN 2003282809 MEDLINE
DN PubMed ID: 12810053
TI Measurements of the free luminal ER Ca(2+) concentration with targeted

"cameleon" ***fluorescent*** proteins.
AU Demaurex Nicolas; Frieden Maud
CS Department of Physiology, University of Geneva Medical Center, 1,
Michel-Servet, CH-1211 4, Geneva, Switzerland..
nicolas.demaurex@medecine.unige.ch
SO Cell calcium, (2003 Aug) 34 (2) 109-19. Ref: 48
Journal code: 8006226. ISSN: 0143-4160.
CY Scotland: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200403
ED Entered STN: 20030618
Last Updated on STN: 20040309
Entered Medline: 20040308

L3 ANSWER 12 OF 25 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN
AN 2004081562 EMBASE
TI Probing Calcium Ions with Biosensors.
AU Nakai J.; Ohkura M.
CS J. Nakai, Department of Information Physiology, Natl. Inst. for
Physiological Sci., Myodaiji, Okazaki, 444-8585, Japan.
jnakai@brain.riken.go.jp
SO Biotechnology and Genetic Engineering Reviews, (2003) 20/- (3-21).
Refs: 36
ISSN: 0264-8725 CODEN: BGERES
CY United Kingdom
DT Journal; General Review
FS 029 Clinical Biochemistry
LA English

L3 ANSWER 13 OF 25 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2004:205660 BIOSIS
DN PREV200400206176
TI Cell - to - cell interaction in activated microglia.
AU Sugiyama, T. [Reprint Author]; Ikeda, M.; Mizuguchi, H.; Kohsaka, S.;
Yoshioka, T.
CS Dept. Mol. Neurobiol, Waseda Univ., Tokyo, Japan
SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2003)
Vol. 2003, pp. Abstract No. 905.16. <http://sfn.scholarone.com>. e-file.
Meeting Info.: 33rd Annual Meeting of the Society of Neuroscience. New
Orleans, LA, USA. November 08-12, 2003. Society of Neuroscience.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 14 Apr 2004
Last Updated on STN: 14 Apr 2004

L3 ANSWER 14 OF 25 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2004:205077 BIOSIS
DN PREV200400205604
TI Transgenic mice expressing genetically - encoded calcium indicators under
control of a chemically inducible promoter.
AU Hasan, M. T. [Reprint Author]; Friedrich, R. W. [Reprint Author]; Both, M.
[Reprint Author]; Larkum, M. E. [Reprint Author]; Waters, J. [Reprint
Author]; Petersen, C. C. H. [Reprint Author]; Dlugosz, S.; Bujard, H.;
Griesbeck, O.; Nagai, T.; Miyawaki, A.; Denk, W. [Reprint Author]
CS Max-Planck Inst. for Med. Res., Heidelberg, Germany
SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2003)
Vol. 2003, pp. Abstract No. 861.26. <http://sfn.scholarone.com>. e-file.
Meeting Info.: 33rd Annual Meeting of the Society of Neuroscience. New
Orleans, LA, USA. November 08-12, 2003. Society of Neuroscience.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 14 Apr 2004
Last Updated on STN: 14 Apr 2004

L3 ANSWER 15 OF 25 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2004:198613 BIOSIS
DN PREV200400199172
TI organelle calcium signaling in transfected pituitary cells using GFP -
targeted calcium biosensors.

AU Fiekers, J. F. [Reprint Author]; Roe, M. [Reprint Author]
 CS Dept. Anat. and NeuroBiol., Univ. Vermont Col. Med, Burlington, VT, USA
 SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2003)
 Vol. 2003, pp. Abstract No. 394.17. <http://sfn.scholarone.com>. e-file.
 Meeting Info.: 33rd Annual Meeting of the Society of Neuroscience. New
 Orleans, LA, USA. November 08-12, 2003. Society of Neuroscience.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 14 Apr 2004
 Last Updated on STN: 14 Apr 2004

L3 ANSWER 16 OF 25 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 DUPLICATE 6
 AN 2003-03861 BIOTECHDS
 TI New ****fluorescent*** protein, useful as indicator for quantifying
 calcium ion concentration, comprises a fusion of a ****fluorescent***
 protein, a calcium binding protein and a linker;
 recombinant protein production via plasmid expression in host cell for
 calcium ion concentration measurement
 AU MIYAWAKI A; NAGAI T
 PA RIKEN KK
 PI EP 1238982 11 Sep 2002
 AI EP 2002-4353 4 Mar 2002
 PRAI JP 2001-59892 5 Mar 2001; JP 2001-59892 5 Mar 2001
 DT Patent
 LA English
 OS WPI: 2002-724916 [79]

L3 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:682860 HCAPLUS
 DN 137:227639
 TI Calmodulin fusion proteins of circularly permuted green
 ****fluorescent*** proteins engineered to sense Ca2+
 IN Miyawaki, Atsushi; Nagai, Kenji
 PA Institute of Physical and Chemical Research, Japan
 SO Jpn. Kokai Tokkyo Koho, 25 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002253261	A2	20020910	JP 2001-59892	20010305
	EP 1238982	A1	20020911	EP 2002-4353	20020304
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2003004306	A1	20030102	US 2002-86738	20020304
PRAI	JP 2001-59892	A	20010305		

L3 ANSWER 18 OF 25 MEDLINE on STN DUPLICATE 7
 AN 2002612281 MEDLINE
 DN PubMed ID: 12149258
 TI Dynamics of glucose-induced membrane recruitment of protein kinase C beta
 II in living pancreatic islet beta-cells.
 AU Pinton Paolo; Tsuboi Takashi; Ainscow Edward K; Pozzan Tullio; Rizzuto
 Rosario; Rutter Guy A
 CS Henry Wellcome Signalling Laboratories and the Department of Biochemistry,
 University of Bristol, Bristol BS8 1TD, United Kingdom.
 SO Journal of biological chemistry, (2002 oct 4) 277 (40) 37702-10.
 Journal code: 2985121R. ISSN: 0021-9258.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200211
 ED Entered STN: 20021010
 Last Updated on STN: 20030105
 Entered Medline: 20021120

L3 ANSWER 19 OF 25 MEDLINE on STN DUPLICATE 8
 AN 2002652644 MEDLINE
 DN PubMed ID: 12411413
 TI Nitric oxide inhibits capacitative Ca2+ entry by suppression of
 mitochondrial Ca2+ handling.
 AU ThyagarajanBaskaran; Malli Roland; Schmidt Kurt; Graier wolfgang F;

Groschner Klaus
Department of Pharmacology and Toxicology, Karl-Franzens-University Graz,
A-8010 Graz, Austria.
British journal of pharmacology, (2002 Nov) 137 (6) 821-30.
Journal code: 7502536. ISSN: 0007-1188.
England: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals
200304
Entered STN: 20021105
Last Updated on STN: 20030409
Entered Medline: 20030408

ANSWER 20 OF 25 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
2003:81124 BIOSIS
PREV200300081124
Dynamic imaging of cellular functions.
Miyawaki, Atsushi [Reprint Author]
Brain Science Institute, RIKEN, Wako, Japan
Cell Structure and Function, (August 2002) Vol. 27, No. 4, pp. 232. print.
Meeting Info.: Fifty-fifth Annual Meeting of the Japan Society for Cell
Biology. Yokohama, Japan. May 21-23, 2002.
ISSN: 0386-7196 (ISSN print).
Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
English
Entered STN: 6 Feb 2003
Last Updated on STN: 6 Feb 2003

ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
2003:96805 HCAPLUS
139:145912
Circularly permuted green ***fluorescent*** proteins engineered to
sense Ca²⁺ and their application to imaging of subcellular Ca²⁺ dynamics
Miyawaki, Atsushi; Nagai, Takeharu; Shimozone, Satoshi; Fukano, Takashi;
Mizuno, Hideaki
Laboratory for Cell Function Dynamics, RIKEN, BSI, RIKEN, Japan
RIKEN Review (2002), 49, 55-59
CODEN: RIRREE6; ISSN: 0919-3405
Institute of Physical and Chemical Research
Journal; General Review
English

CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 22 OF 25 MEDLINE on STN
2002184642 MEDLINE
PubMed ID: 11917155
Confocal imaging of subcellular Ca²⁺ concentrations using a
dual-excitation ratiometric indicator based on green ***fluorescent***
protein.
Shimozone Satoshi; Fukano Takashi; Nagai Takeharu; Kirino Yutaka; Mizuno
Hideaki; Miyawaki Atsushi
Laboratory for Cell Function and Dynamics, Advanced Technology Development
Center, Brain Science Institute, RIKEN, Wako-city, Saitama, Japan.
Science's STKE [electronic resource] : signal transduction knowledge
environment, (2002 Mar 26) 2002 (125) PL4.
Journal code: 100964423. ISSN: 1525-8882.
United States
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals
200204
Entered STN: 20020403
Last Updated on STN: 20020412
Entered Medline: 20020410

ANSWER 23 OF 25 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
2003:304107 BIOSIS
PREV200300304107
MITOCHONDRIAL CALCIUM DYNAMICS IN ATT20 MURINE PITUITARY CELLS.
Sugiyama, T. [Reprint Author]; Ikeda, M.; Nagai, T.; Miyawaki, A.;
Yoshioka, T. [Reprint Author]
Adv. res. cent. for Human Sci., Waseda University, Nishitokyo, Japan
Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002)

Vol. 2002, pp. Abstract No. 436.4. <http://sfn.scholarone.com>. cd-rom.
Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience.
Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
Conference; (Meeting)
Conference; (Meeting Poster)
Conference; Abstract; (Meeting Abstract)
English
Entered STN: 2 Jul 2003
Last Updated on STN: 2 Jul 2003

ANSWER 24 OF 25 MEDLINE on STN DUPLICATE 9
2001509479 MEDLINE
PubMed ID: 11532963
Beat-to-beat oscillations of mitochondrial [Ca²⁺] in cardiac cells.
Robert V; Gurlini P; Tosello V; Nagai T; Miyawaki A; Di Lisa F; Pozzan T
Department of Biomedical Sciences, CNR Center of Biomembranes, University
of Padua, Via Colombo 3, 35121 Padua, Italy.. pozzant@civ.bio.unipd.it
EMBO journal, (2001 Sep 3) 20 (17) 4998-5007.
Journal code: 8208664. ISSN: 0261-4189.
England: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals
200110
Entered STN: 20010917
Last Updated on STN: 20011022
Entered Medline: 20011018

ANSWER 25 OF 25 MEDLINE on STN DUPLICATE 10
2002007188 MEDLINE
PubMed ID: 11248055
Circularly permuted green ***fluorescent*** proteins engineered to
sense Ca²⁺.
Nagai T; Sawano A; Park E S; Miyawaki A
Laboratory for Cell Function and Dynamics, Advanced Technology Development
Center, Brain Science Institute, Institute of Physical and Chemical
Research (RIKEN), 2-1 Hirosawa, Wako, Saitama, 351-0198, Japan.
Proceedings of the National Academy of Sciences of the United States of
America, (2001 Mar 13) 98 (6) 3197-202.
Journal code: 7505876. ISSN: 0027-8424.
United States
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals
200112
Entered STN: 20020121
Last Updated on STN: 20030105
Entered Medline: 20011204

> d 17, 25 ab

ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
Fusion proteins of ***fluorescent*** protein with a calcium-binding
protein and its peptide substrate, whose ***fluorescence*** varies in
a Ca²⁺-dependent manner, and its use as Ca²⁺ sensor, are disclosed. Green
fluorescent protein (GFP), yellow ***fluorescent*** protein
(YFP), cyan-green ***fluorescent*** protein (CGFP), red
fluorescent protein, or blue ***fluorescent*** protein, and
their derivs. are used. Calmodulin, troponin C, calcineurin B, myosin
light chain, S-modulin, visinin, VILIP, neurocalcin, hippocalcin,
frequentin, caltactin, calpain large subunit, S100 protein, parvalbumin,
calbindin D9k, calbinding D28k, or calretinin, are used as fusion partner.
To visualize Ca²⁺-dependent protein-protein interactions in living cells
by ***fluorescence*** readouts, the authors used a circularly permuted
green ***fluorescent*** protein (cpGFP), in which the amino and
carboxyl portions had been interchanged and reconnected by a short spacer
between the original termini. The cpGFP was fused to calmodulin and its
target peptide, M13. The chimeric protein, which the authors have named "
pericam", was ***fluorescent*** and its spectral properties
changed reversibly with the amt. of Ca²⁺, probably because of the
interaction between calmodulin and M13 leading to an alteration of the
environment surrounding the chromophore. Three types of ***pericam***
were obtained by mutating several amino acids adjacent to the chromophore.
Of these, "flash- ***pericam***" became brighter with Ca²⁺, whereas
"inverse- ***pericam***" dimmed. On the other hand, "ratiometric-

pericam " had an excitation wavelength changing in a Ca²⁺-dependent manner. All of the ***pericams*** expressed in HeLa cells were able to monitor free Ca²⁺ dynamics, such as Ca²⁺ oscillations in the cytosol and the nucleus. Ca²⁺ imaging using high-speed confocal line-scanning microscopy and a flash- ***pericam*** allowed to detect the free propagation of Ca²⁺ ions across the nuclear envelope. Then, free Ca²⁺ concns. in the nucleus and mitochondria were simultaneously measured by using ratio-metric- ***pericams*** having appropriate localization signals, revealing that extra-mitochondrial Ca²⁺ transients caused rapid changes in the concn. of mitochondrial Ca²⁺. Finally, a "split- ***pericam*** " was made by deleting the linker in the flash- ***pericam***. The Ca²⁺-dependent interaction between calmodulin and M13 in HeLa cells was monitored by the assocn. of the two halves of GFP, neither of which was ***fluorescent*** by itself.

L3 ANSWER 25 OF 25 MEDLINE on STN DUPLICATE 10
 AB To visualize Ca(2+)-dependent protein-protein interactions in living cells by ***fluorescence*** readouts, we used a circularly permuted green ***fluorescent*** protein (cpGFP), in which the amino and carboxyl portions had been interchanged and reconnected by a short spacer between the original termini. The cpGFP was fused to calmodulin and its target peptide, M13. The chimeric protein, which we have named " ***pericam*** ", was ***fluorescent*** and its spectral properties changed reversibly with the amount of Ca(2+), probably because of the interaction between calmodulin and M13 leading to an alteration of the environment surrounding the chromophore. Three types of ***pericam*** were obtained by mutating several amino acids adjacent to the chromophore. Of these, "flash- ***pericam*** " became brighter with Ca(2+), whereas "inverse- ***pericam*** " dimmed. On the other hand, "ratiometric- ***pericam*** " had an excitation wavelength changing in a Ca(2+)-dependent manner. All of the ***pericams*** expressed in HeLa cells were able to monitor free Ca(2+) dynamics, such as Ca(2+) oscillations in the cytosol and the nucleus. Ca(2+) imaging using high-speed confocal line-scanning microscopy and a flash- ***pericam*** allowed to detect the free propagation of Ca(2+) ions across the nuclear envelope. Then, free Ca(2+) concentrations in the nucleus and mitochondria were simultaneously measured by using ratiometric- ***pericams*** having appropriate localization signals, revealing that extra-mitochondrial Ca(2+) transients caused rapid changes in the concentration of mitochondrial Ca(2+). Finally, a "split- ***pericam*** " was made by deleting the linker in the flash- ***pericam***. The Ca(2+)-dependent interaction between calmodulin and M13 in HeLa cells was monitored by the association of the two halves of GFP, neither of which was ***fluorescent*** by itself.

=> d 17, 25

L3 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2002:682860 HCAPLUS
 DN 137:227639
 TI Calmodulin fusion proteins of circularly permuted green
 fluorescent proteins engineered to sense Ca²⁺
 IN Miyawaki, Atsushi; Nagai, Kenji
 PA Institute of Physical and Chemical Research, Japan
 SO Jpn. Kokai Tokyo Koho, 25 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002253261	A2	20020910	JP 2001-59892	20010305
	EP 1238982	A1	20020911	EP 2002-4353	20020304
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2003004306	A1	20030102	US 2002-86738	20020304
PRAI	JP 2001-59892	A	20010305		

L3 ANSWER 25 OF 25 MEDLINE on STN DUPLICATE 10
 AN 2002007188 MEDLINE
 DN PubMed ID: 11248055
 TI Circularly permuted green ***fluorescent*** proteins engineered to sense Ca²⁺.
 AU Nagai T; Sawano A; Park E S; Miyawaki A
 CS Laboratory for Cell Function and Dynamics, Advanced Technology Development

Center, Brain Science Institute, Institute of Physical and Chemical
Research (RIKEN), 2-1 Hirosawa, Wako, Saitama, 351-0198, Japan.
SO Proceedings of the National Academy of Sciences of the United States of
America, (2001 Mar 13) 98 (6) 3197-202.
Journal code: 7505876. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200112
ED Entered STN: 20020121
Last Updated on STN: 20030105
Entered Medline: 20011204

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(FILE 'HOME' ENTERED AT 18:51:12 ON 22 JUL 2004)

FILE 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS,
NTIS, ESBIODASE, BIOTECHNO, WPIDS' ENTERED AT 18:51:23 ON 22 JUL 2004
L1 96 S PERICAM
L2 76 S PERICAM AND FLUORESCEN?
L3 25 DUP REM L2 (51 DUPLICATES REMOVED)

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
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